

ABSTRACT

It aims at achieving effective diversity reception in even a small sized wireless signal-receiving apparatus, improvement in sensitivity of antenna, and implementation of the small size, the lower 5 power consumption, and the low price of the antenna. The antenna 100 has antenna elements 10 and 11 that are positioned at smaller distance apart than a half wavelength of a frequency of signal to be received, a transmission line L1 and a transmission line L2 having a delay circuit 14 with a predetermined electric length, and a changeover switch 13. 10 A difference of an electric length of a path that passes from the antenna element 10 through the transmission line L1 or L2 toward a synthesizer 15 from an electric length of a path that passes from the antenna element 11 through the transmission line L2 or L1 toward the synthesizer 15 is set so as to become $(\lambda/2-\alpha)$ or $(-\lambda/2+\alpha)$. When receiving a signal, 15 the changeover switch 13 changes based on a control signal, so that directivity of the antenna 100 can vary.